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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,137	02/19/2004	Paul R.M. Carpentier	CRGOP002	5213

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EXAMINER	
LU, KUEN S	

ART UNIT	PAPER NUMBER
2167	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/782,137	CARPENTIER ET AL.	
	Examiner	Art Unit	
	Kuen S. Lu	2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 April 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *7-11 and 31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *7-11 and 31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-5,13,14 and 16-30, 32-33* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4/23/2007*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to Applicant's Amendment filed April 10, 2007. Applicant's Amendment amending claims 1-4, 7-8, 13 and 17; canceling 6, 12 and 15; and adding new 30-33 is acknowledged. Also acknowledged is a new drawing filed for replacing Fig. 13. Examiner's objection to Fig. 13 is hereby withdrawn.

2. Concerning Applicant election of Group II for examination, with traverse, please see Examiner's response in ***"Response to Applicant's Request for Reconsideration of Election/Restriction Requirements",*** shown below.

3. Please note claims 7-11 and 31 are pending and claims 1-5, 13-14, 16-30 and 32-33 are not elected for examination.

4. As to Applicant's Arguments/Remarks filed November 15, 2006, please see Examiner's response in "***Response to Arguments***", following this Office Action for Final Rejection (hereafter "the Action"), shown next.

Information Disclosure Statement

5. The information disclosure statements submitted April 23, 2007 is acknowledged and its corresponding PTO-1449 is electronically signed and attached.

Response to Applicant's Request for Reconsideration of Election/Restriction

Requirements

6. Applicant's election with traverse of Group II (claims 7-11 and 31) in the reply filed on April 10, 2007 is acknowledged.

Applicant argued that, according to MPEP § 803, if the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to independent or distinct inventions.

Applicant further stated that, in the present case, the claims in each of the groups identified by the Examiner clearly comprise similar or same elements and would not place undue burden on the examiner. Applicant also argued that Examiner utilized same reference for rejecting claims in different groups as evidence showing Examiner could not be seriously burdened by examining all claims together and requested that the restriction requirement be withdrawn and that each of the claims presently pending in this application be examined. This is not found persuasive for the reasons set forth herein below:

With reference to "Related Inventions", MPEP 808.02 states:
Where, as disclosed in the application, the several inventions claimed are related, and such related inventions are not patentably distinct as claimed, restriction under 35 U.S.C. 121 is never proper (MPEP 806.05). If applicant optionally restricts, double patenting may be held. **Where the related inventions as claimed are shown to be distinct under the criteria of MPEP 806.05(c) - 806.05 (i), the examiner, in order to establish reasons for insisting upon restriction, must show by appropriate explanation** one of the following:

(A) Separate classification thereof: This shows that each distinct subject has attained recognition in the art as a separate subject for inventive effort, and also a separate field of search. Patents need not be cited to show separate classification.

(B) A separate status in the art when they are classifiable together: Even though they are classified together, each subject can be shown to have formed a separate subject for inventive effort when an explanation indicates a recognition of separate inventive effort by inventors. Separate status in the art may be shown by citing patents which are evidence of such separate status, and also of a separate field of search.

(C) A different field of search: Where it is necessary to search for one of the distinct subjects in places where no pertinent art to the other subject exists, a different field of search is shown, even though the two are classified together. The indicated different field of search must in fact be pertinent to the type of subject matter covered by the claims. Patents need not be cited to show different fields of search. Where, however, the classification is the same and the field of search is the same and there is no clear indication of separate future classification and field of search, no reasons exist for dividing among related inventions.

Pleas note Examiner has respectfully fulfilled his duties by providing appropriate explanation as to how the related inventions of Groups I through VI are distinct under the criteria of MPEP: 806.05(c) - 806.05(i). Examiner also respectfully learned from Applicant's response to the non-Final rejection and recognized that the groups of claims are clearly distinct and specifically focused on different areas of invention and, therefore a detailed search of prior art based on sub-level of fields is required in order to avoid a

series of serious and continuous burdens of examining such an extra ordinarily large set of groups of distinct inventions.

Please see the sections below in highlighted groups:

Election/Restrictions

7.1. Restriction to one of the following six inventions is required under 35 U.S.C. 121:

I. Claims 1-5, 19-21 and 30, drawn to file archiving or backup, classified in class 707, subclass 204.

II. Claims 7-11 and 31, drawn to query formulation, input preparation or translation, classified in class 707, subclass 4;

III. Claims 13-14, 16 and 32, drawn to generating database or data structure, classified in class 707, subclass 102.

IV. Claims 17, 18 and 33, drawn to manipulating data structure, classified in class 707, subclass 101.

V. Claims 22-25, drawn to pattern matching access, classified in class 707, subclass 6.

VI. Claims 26-29, drawn to query augmentation and refining, classified in class 707, subclass 5.

7.2. The inventions I, II, III, IV, V and VI are related as sub-combinations disclosed as usable together in a single combination. The sub-combinations are distinct from each other if they are shown to be separately usable.

In the instant case, invention **I** is related to storing a file to a database of files.

Invention **II** is mainly related to retrieving a file from a database using file identification.

As for invention **III**, it is about creating a hash authority data structure.

The key element of invention **IV** is for accessing and updating a data structure.

Concerning invention **V**, the invention is mainly for searching a data structure for a value matching a verification hash value.

Finally, invention **VI** specifically retrieves a file from a database using a random number generator.

Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and the search required for Group **I** is not required for Groups II through VI, the search required for Group **II** is not required for Groups I and III through VI, the search required for Group **III** is not required for Groups I-II and IV through VI, the search required for Group **IV** is not required for Groups I through III and V-VI, the search required for Group **V** is not required for Groups I through IV and VI, and the search required for Group **VI** is not required for Groups I through V, restriction for examination purposes' as indicated is proper.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Besides that requiring an examiner does not seem to be in conformance with two well known Patent Goals outlined in the published Strategic Plan of the U.S. Patent and Trademark Office, available to the general public at <<<www.uspto.gov>>>. **The**

purpose of these goals is an efficient and streamlined patent process to reduce the cycle time and improve the quality of a patent issued. The common sense is also that searching in limited and appropriate areas would turn out a prior art reference faster and thus help close the prosecution of a case earlier.

So in view of the above mentioned MPEP sections and in the spirit of fulfilling stated Patent Goals, the examiner respectfully submits that, the requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8.1. Claims 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shinoda et al. (U.S. Patent Application 2001/0027450, hereafter "Shinoda") in view of Shah et al. (U.S. Patent Application 2003/0009538, hereafter "Shah").

As per claim 7, Shinoda teaches "A method of retrieving a desired computer file from a database" (See Fig. 8 and [0074] where a user sends a request to a server for requesting one or more documents), said method comprising:

"obtaining" ... "said desired computer file" (See Fig. 8 and [0074] where a user sends a request to a server for requesting one or more documents and receives the desired).

Although the document(s) is identified for requesting and receiving, Shinoda does not explicitly teach the document(s) identified by obtaining "a unique identifier".

However, Shah teaches each file has a unique identifier obtaining by combining an application number and a file number within the application at [0181].

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine the teaching of Shah with Shinoda reference by implementing network caching on Shinoda's system for detecting content falsification and delivery because both references are directed to delivering content where Shah specifically teaches streaming content via network caching to improve efficiency of file delivery while Shinoda focuses on detecting falsification in the content delivery process, and the combined teaching of the references would have enabled Shinoda to deliver falsification-proof content to clients and to improve efficiency of detecting falsification of content on the fly (cache) and delivering content efficiently. (See BACKGROUND OF THE INVENTION of the references).

The combined teaching of Shah and Shinoda references further teaches the following:

"retrieving a stored file from said database using said unique identifier as a reference" (See Shinoda: Fig. 8 and [0074] where a user sends a request to a server for requesting one or more documents, and Shah: [0181] where each file has a unique identifier obtaining by combining an application number and a file number within the application);

"retrieving a unique identifier-hash value pair from a data structure associated with said database by using said unique identifier, wherein said hash value has been derived from said stored file using a verification hash function, said hash value being different from said unique identifier" (See Shinoda: [0101] where hash value of file content in a data unit is calculated and embedded into a data structure; Shah: [0181] where each file has a unique identifier obtaining by combining an application number and a file number within the application; noted is that the unique file identifier consists of application number and a file number with the application which is different from a hash value calculated from file content);

"computing a verification hash value for said stored file using said verification hash function" (See Shinoda: [0117] where a falsification-detecting-information producing and processing unit at the exit gate device calculates verification hash value of HTML file content received from a server);

"comparing said verification hash value to said second hash value" (See Shinoda: [0117] and [0101] where the verification hash value calculated at the exit gate device for the HTML file content received from the server is compared to the hash value calculated at the server) and

"determining that said stored file is said desired file when said verification hash value matches said second hash value, whereby said desired file is retrieved from said database" (See Shinoda: [0117] where the verification hash value and the hash value is compared to determine if the HTML content received at the exit gate device is the same content at the server without being falsified).

As per claim 9, the combined teaching of Shah and Shinoda references further teaches "when it is determined that said stored file is said desired file, delivering said stored file to a user" (See Shinoda: [0117] where the verification hash value and the hash value is compared to determine if the HTML content received at the exit gate device is the same content at the server for delivering to client).

8.2. Claims 8, 10-11 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shinoda et al. (U.S. Patent Application 2001/0027450, hereafter "Shinoda") in view of Shah et al. (U.S. Patent Application 2003/0009538, hereafter "Shah"), as applied to claim 7 above, and further in view of Ruben et al. (U.S. Patent 6,138,237, hereafter "Ruben").

As per claim 8, the combined teaching of Shah and Shinoda references further teaches retrieving and verifying file retrieved as described above.

The combined teaching of Shah and Shinoda references does not explicitly teach "computing an addressing hash value for said stored file using an addressing hash function".

However, Ruben teaches "computing an addressing hash value for said stored file using an addressing hash function" (See col. 4, lines 4-7 where file address is hashed and included in an authorization code).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine the teaching of Ruben with Shah and Shinoda references by calculating file address hash and including the hashed address in the content distribution and usage authorization code because all references are directed to content delivery where Shah and Shinoda references are respectively directed to efficiently delivering content and detecting content falsification while Ruben is dedicated to preventing unauthorized use of distributed content, and the further combined teaching would have enabled Shinoda and Shah's systems to deliver content in an efficient manner, without being falsified during delivery process, and at the same, restricting the use and delivery of content only to authorized. (See BACKGROUND OF THE INVENTION of the references).

The combined teaching of Ruben, Shah and Shinoda references further teaches the following:

"comparing said addressing hash value to said unique identifier" (See Ruben: col. 4, lines 7-27 where document's hashed address is compared against resource file's authorization code to determine rendering a document) and

"indicating that said unique identifier matches said addressing hash value" (See Ruben: col. 4, lines 7-27 where document's hashed address is compared against resource file's authorization code to render a document if the result comparison is equal, Shah: [0181] where each file has a unique identifier obtaining by combining an application number and a file number within the application).

As per claim 10, the combined teaching of Ruben, Shah and Shinoda references further teaches "performing said step of retrieving a stored file by searching said data structure for said unique identifier" (See Shah: [0181] where request of opening a file is handled in file handle by using an unique file identifier).

As per claim 11, the combined teaching of Ruben, Shah and Shinoda references further teaches "wherein said data structure is a table, a list or a tree data structure" (See Shah: [0181] where request of opening a file is handled in file handle by using an unique file identifier consists of an application number and a file number within the application, a block of formatted text, considered a table of one row of data).

As per claim 31, the combined teaching of Ruben, Shah and Shinoda references further teaches "wherein said unique identifier is an identifying hash value computed from said file using an identifying hash function, is a random number generated using a random number generator, or is a pseudo random number generated using a pseudo random number generator" (See Ruben: col. 4, lines 7-27 where document's hashed

address is compared against resource file's authorization code to render a document if the result comparison is equal, Shah: [0181] where each file has a unique identifier obtaining by combining an application number and a file number within the application).

Prior Art

9.1. The prior art made of record

I. U.S. Patent Application 2001/0027450

J. U.S. Patent Application 2003/0009538

K. U.S. Patent 6,138,237

9.2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A. U.S. Patent Application 2003/0005306

B. U.S. Patent Application 2004/0111608

C. U.S. Patent 5,742,807

D. U.S. Patent 4,807,182

E. U.S. Patent 4,741,028

F. U.S. Patent Application 2005/0187970

G. U.S. Patent Application 2002/0029347

H. U.S. Patent Application 2003/0188180

Response to Arguments

10. Applicant's arguments with respect to claims 1-29, filed on November 15, 2006 have been fully considered but are moot in view of the new ground(s) of rejection. As for Applicant's arguments with respect to claims 1-5, 7-11, 13-14 and 16-33, Examiner has

respectfully addressed in the section of ***"Response to Applicant's Request for Reconsideration of Election/Restriction Requirements"*** as previously described in the Action.

Conclusion

11. Applicant's amendment necessitated the new grounds of rejection presented in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1 .136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuen S. Lu whose telephone number is (571) 272-4114. The examiner can normally be reached on Monday-Friday (8:00 am-5:00 pm). If attempts to reach the examiner by telephone pre unsuccessful, the examiner's Supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for Page 13 published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, please call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kuen S. Lu,

Patent Examiner, Art Unit 2167

June 9, 2007